

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle 5755 8th Street East Tacoma, WA 98424 Tel: (253)922-2310

TestAmerica Job ID: 580-44304-1 Client Project/Site: Clean Harbors

For:

ISI Environmental Services 215 S Laura Wichita, Kansas 67211

Attn: Brady Gerber

Authorized for release by: 7/15/2014 1:16:23 PM

Melissa Armstrong, Project Manager II (253)248-4975

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: ISI Environmental Services Project/Site: Clean Harbors TestAmerica Job ID: 580-44304-1

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Case Narrative

Client: ISI Environmental Services Project/Site: Clean Harbors TestAmerica Job ID: 580-44304-1

Job ID: 580-44304-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The sample was received on 7/1/2014 10:05 AM; the sample arrived in good condition, properly preserved and, where required, on ice.

The temperature of the cooler at receipt was 3.7° C.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Definitions/Glossary

Client: ISI Environmental Services Project/Site: Clean Harbors

TestAmerica Job ID: 580-44304-1

Glossary

RPD

TEF

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: ISI Environmental Services

TestAmerica Job ID: 580-44304-1 Project/Site: Clean Harbors

Client Sample ID: J4-F1 Lab Sample ID: 580-44304-1

Date Collected: 06/30/14 15:00 Matrix: Solid Date Received: 07/01/14 10:05 Percent Solids: 83.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dalapon	ND		30		ug/Kg	₩	07/07/14 15:49	07/12/14 17:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	71		51 - 129				07/07/14 15:49	07/12/14 17:08	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10		%			07/03/14 12:29	1
Percent Moisture	17		0.10		%			07/03/14 12:29	1

Client: ISI Environmental Services Project/Site: Clean Harbors

TestAmerica Job ID: 580-44304-1

23 - 117

Method: 8151A - Herbicides (GC/MS)

Lab Sample ID: MB 580-163211/1-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 163764 мв мв

Prep Type: Total/NA

Prep Batch: 163211

Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Analyte 25 07/07/14 15:49 Dalapon ND ug/Kg 07/12/14 15:36

MB MB

Qualifier Dil Fac Surrogate %Recovery Limits Prepared Analyzed 51 - 129 07/07/14 15:49 07/12/14 15:36 2,4-Dichlorophenylacetic acid 105

Lab Sample ID: LCS 580-163211/2-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 163764

Prep Type: Total/NA **Prep Batch: 163211** LCS LCS Spike

ug/Kg

Added Qualifier Analyte Result Unit Limits %Rec ug/Kg 38 Dalapon 667 23 - 117 252

LCS LCS

Surrogate %Recovery Qualifier Limits 51 - 129 2,4-Dichlorophenylacetic acid 106

Lab Sample ID: LCSD 580-163211/3-A Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Matrix: Solid

Dalapon

Analysis Batch: 163764

Prep Batch: 163211 LCSD LCSD Spike %Rec. RPD Added Qualifier Analyte Result Unit D %Rec Limits RPD Limit

274

667

LCSD LCSD

Surrogate %Recovery Qualifier Limits 2,4-Dichlorophenylacetic acid 120 51 - 129

Lab Sample ID: 580-44304-1 MS Client Sample ID: J4-F1

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 163764 **Prep Batch: 163211** MS MS Sample Sample Spike %Rec.

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Dalapon ND 755 173 ug/Kg Ü 23 23 _ 117

MS MS

%Recovery Surrogate Qualifier Limits 2,4-Dichlorophenylacetic acid 58 51 - 129

Lab Sample ID: 580-44304-1 MSD Client Sample ID: J4-F1

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 163764 **Prep Batch: 163211**

Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Limits Analyte Result Qualifier Unit D %Rec RPD Limit 77 Dalapon ND 795 218 ug/Kg 27 23 - 117 23 30

MSD MSD Surrogate %Recovery Qualifier Limits

2,4-Dichlorophenylacetic acid 51 _ 129 64

TestAmerica Seattle

Lab Chronicle

Client: ISI Environmental Services

Project/Site: Clean Harbors

TestAmerica Job ID: 580-44304-1

Lab Sample ID: 580-44304-1

Percent Solids: 83.4

Client Sample ID: J4-F1 Date Collected: 06/30/14 15:00 Matrix: Solid Date Received: 07/01/14 10:05

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			163211	07/07/14 15:49	RBD	TAL SEA
Total/NA	Analysis	8151A		1	163764	07/12/14 17:08	ERB	TAL SEA
Total/NA	Analysis	D 2216		1	162990	07/03/14 12:29	KJV	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: ISI Environmental Services

TestAmerica Job ID: 580-44304-1

Project/Site: Clean Harbors

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-112	05-27-15
California	NELAP	9	01115CA	01-31-14 *
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

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 $[\]ensuremath{^{\star}}$ Certification renewal pending - certification considered valid.

Sample Summary

Client: ISI Environmental Services Project/Site: Clean Harbors

TestAmerica Job ID: 580-44304-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-44304-1	J4-F1	Solid	06/30/14 15:00	07/01/14 10:05

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Seattle/Tacoma

5755 8th Street East

Tacoma, WA 98424

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc. COC No: Sample Specific Notes: cocs Cooler Discovery Cooler Discovery Cooler Discovery Eughne Lab Wel/Packs Packing BUSBUL SDG No. Job No. 44304 Carrier: Date: Site Contact: Lab Contact: 580-44304 Chain of Custody Dalapon # of Cont. Matrix `` Analysis Turnaround Time Soil Calendar (C) or Work Days (W) Sample Type TAT if different from Below 2 weeks 2 days 1 week 1 day 1500 Grab Sample Time Project Manager: Sample Date 6/30/2014 Tel/Fax: Sample Identification Client Contact FAX phone 253.922.2310 fax 253.922.5047 **J4FI** (xxx) xxx-xxxx Project Name: Clean Harbors iSi Environmental Wichita KS 67211 215 South Laura Site: Wichita, KS (316) 264-7050 #0d

Form No. CA-C-WI-002, dated 04/07/2011 Date/Time: Company: Company: Received by: 6-30-14/ Date/Time: Date/Time: Company: Company:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Month

Retum To Client

Unknown

Poison B

Skin Irritant

Special Instructions/QC Requirements & Comments:

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

ossible Hazard Identification

Company:

Relinquished by:

Relinquished by:

Relinquished by:

Login Sample Receipt Checklist

Client: ISI Environmental Services Job Number: 580-44304-1

Login Number: 44304 List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Creator: Biankinship, Tom X		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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